Pad+D/A Connections

Internal Connections

TEG

VIN

VIN_BOOST

BC_OUT

UVA_VDD_DIG_CTRL<3:0>

DVDD_0p5 = VDD_MCU
VDD_ACCELERATORS
VDD_DPM
VDD_VAR
VDD_MEM
VDD_SC

List of Analog/Digital Signal Interfaces:

A->D:

1. *ADC_POUT_UW<7:0>*
2. *System_CLK*
3. *POR*
4. *ADC_SYNC*
5. *Demod_Out_UW*

D->A:

1. *UVA_CH_SEL<2:0>*
2. *UVA_VDD_DIG_CTRL<3:0>*
3. *UVA_Pack_Clk*
4. *UVA_Pack_Data*
5. *UVA_CLK_AFE*
6. *UVA_RX_EN_n*
7. *UVA_TX_EN_n*
8. *UVA_CH_EN_n<3:0>*
9. *UVA_Pack_En_n*
10. *PROGRAM_SR_buffered*
11. *ADC_Rst_n*
12. *XTAL_EN_RX*
13. *XTAL_EN_TX*

ANALOG POWER MGMT:

VSS

BOOST CONVERTER

CP

REGULATOR

AVDD_1p2
AVDD_1p0
AVDD_0p5
VDDH
DVDD_0p5

ANALOG VDDS

DIGITAL VDDS

Vcap

VOUT_DC

VIN_RECT

RECTIFIER

POR

BANDGAP REFERENCE

POR

RX+DEMOD

DEMOD

ILRX

RFP

RFN

BALUN

ANTRX

XTAL_RX1

XTAL

44.736MHz

XTAL_RX2

Demod_Out_UW

XTAL_EN_RX

UVA_RX_EN_n

CDR

STATUS<1:0>

MODE<1:0>

DMA

DATA MEMORY

Bus2<7:0>

Bus1<7:0>

INST_MEM<95:0>

INST MEMORY

ADDR<6:0>

PICCPU (ACCEL)

ADC_POUT_UW<7:0>

ADC_SYNC

DIGITAL POWER MANAGEMENT

BYPASS_IMEM

INST_MEM<95:0>

INST_SCAN<95:0>

INST MUX

RST_INTERNAL

INST_OUT<95:0>

CLOCK

DMAflag

AFIBflag

PROGRAM_SR

PROGRAM_BITS

SCAN_ENMEMPROG

IMEM_ENABLE

MODE CONTROLS

RESETS

CLOCK GATES

VDD SWITCHES

INST<11:0>

PC<9:0>

RR ACCEL

newRR<7:0>

AFIB ACCEL

AFIBflag

FIR ACCEL

ENV DET ACCEL

PAR2SER

ADDR<3:0>

PHASE<3:0>

CLK ARBITER

CLK_ADC

CLK_RR

CLK_FIR

CLK_DMA

SCAN CHAIN

AFE:

VDD_MCU

VIN_BOOST

BC_OUT

UVA_CH_EN_n<3:0>

PROGRAM_SR_buffered

MUX_CTRL_A

DAC

UVA_CLK_AFE

UVA_CH_SEL<2:0>

DECODER

LNA

VGA

SAH

ADC

ADC_POUT_UW<7:0>

ADC_SYNC

VSS

MUX_OUT

SAH_OUT

ADC_Rst_n

VREF_HI_ADC

VSS

VDD_PAD
VDD_VAR
PROGRAM
SCAN_DATAPATH
CLK_SCAN
CLK_BYPASS
BYPASS_CTL
IMEM_ENABLE
DATAPATH_SCANOUT
RESET
RESET_SC
SCAN_IN
VSS
VDDH
VDD_BUF_IN
VDD_BUF_OUT
SR_BYPASS
BYPASS_IMEM
VDD_MEM
VDD_DPM
VDD_MCU
VDD_ACCELERATORS
CLK_OUT
MEM_SCANOUT
or_out
Data_OUT
Demod_Out
SCAN_ENMEMPROG
VDD_SC

PAD RING

TX:

System_CLK

XTAL

200kHz

UVA_RX_EN_n

XTAL_EN_TX

VDD_BUFF_TX

XTAL_TX1

XTAL

44.545MHz

XTAL_TX2

ILRO_TX

ANTTX

ILTX

TX_OUT

VDD_PA

UVA_Pack_en_n

UVA_Pack_Clk

UVA_Pack_Data